IN THE SPECIFICATION:

Please replace the paragraph that begins at line 9 of page 5 with the following:

In accordance with one aspect of this invention, the simulation takes place in blocks of a given number of edge atom events (rather than in time intervals Δ as in the Eick et al article). Advantageously, that number, M, is the integer closest to e $\log_e N$, where e is the logarithmic constant whose first 6 digits are 2.71828. That is, each PE simulates M edge atom events in the course of a simulation phase, and then stops in preparation for a communication phase. The communications phase ascertains whether any errors may have crept in because, during the simulation phase, the PE is oblivious to the events that are being simulated by neighboring PEs. As an aside, it should be realized that setting M to some other number does not cause the method disclosed herein to fail. Only its efficiency is affected. Choosing M to be approximately equal to e $\log_e N$ does not materially affect the efficiency of the method.